



binarization means and engine characteristic information representing engine characteristics of the image output device.

3. An image processing apparatus having input means for  
5 inputting, pixel by pixel, a multilevel image containing gray-scale information, and binarization means for binarizing the multilevel image, which has been input by the input means, to a binary image, said apparatus comprising:

10 communication means for communicating with an external image output device via a network;

characteristic-information storage means for storing characteristic information of the external image output device;

15 connectivity control means for controlling connectivity of the binary image, which is binarized by the binarization means, based upon the characteristic information stored by said characteristic-information storage means; and

20 transmitting means for transmitting the binary image, the connectivity of which has been controlled by said connectivity control means, to the external image output device via said communication means.

4. The apparatus according to claim 3, wherein said  
25 characteristic-information storage means reads and stores characteristic information from a storage medium

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gray-scale information, and binarization means for binarizing the multilevel image, which has been input by the input means, to a binary image, said apparatus comprising:

5           communication means for communicating with an external image output device via a network;

          reading means for reading a test pattern for calculating a connectivity parameter;

          parameter calculation means for calculating a  
10       parameter, which controls connectivity of the binary image binarized by said binarization means, in conformity with results obtained from said reading means;

          connectivity control means for controlling  
15       connectivity of a binary image, which is binarized by said binarization means, based upon the parameter calculated by said parameter calculation means; and

          transmitting means for transmitting the binary image, the connectivity of which has been controlled by  
20       the connectivity control means, to the external image output device via said communication means.

8.   The apparatus according to claim 7, wherein the test pattern for detecting connectivity is a test pattern that has been output by the external image output  
25   device.

9.   An image processing method for inputting, pixel by

pixel, a multilevel image containing gray-scale information, and binarizing the multilevel image to a binary image, comprising:

5 a communication step of communicating with an external image output device via a network;

a characteristic-information storage step of receiving characteristic information of the external image output device at said communication step and storing the characteristic information;

10 a connectivity control step of controlling connectivity of the binary image, which is binarized, based upon the characteristic information stored at said characteristic-information storage step; and

15 a transmitting step of transmitting the binary image, the connectivity of which has been controlled at said connectivity control step, to the external image output device.

10. An image processing method for inputting, pixel by pixel, a multilevel image containing gray-scale information, and binarizing the multilevel image to a binary image, comprising:

a communication step of communicating with an external image output device via a network;

25 a characteristic-information storage step of storing characteristic information of the external image output device;



information, and binarizing the multilevel image to a binary image, comprising:

a communication step of communicating with an external image output device via a network;

5 a reading step of reading a test pattern for calculating a connectivity parameter;

a parameter calculation step of calculating a parameter, which controls connectivity of the binary image binarized, in conformity with results obtained at  
10 said reading step;

a connectivity control step of controlling connectivity of a binary image, which is binarized, based upon the parameter calculated at said parameter calculation step; and

15 a transmitting step of transmitting the binary image, the connectivity of which has been controlled at the connectivity control step, to the external image output device.

13. The method according to claim 12, wherein the test  
20 pattern for detecting connectivity is a test pattern that has been output by the external image output device.

14. A computer-readable storage medium storing program code of an image processing method for inputting, pixel  
25 by pixel, a multilevel image containing gray-scale information, and binarizing the multilevel image to a

binary image, comprising:

code of a communication step of communicating with  
an external image output device via a network;

code of a characteristic-information storage step  
5 of storing received characteristic information of the  
external image output device;

code of a connectivity control step of controlling  
connectivity of the binary image, which is binarized,  
based upon the characteristic information stored; and

10 code of a transmitting step of transmitting the  
binary image, the connectivity of which has been  
controlled, to the external image output device.

15. A computer-readable storage medium storing program  
code of an image processing method for inputting, pixel  
15 by pixel, a multilevel image containing gray-scale  
information, and binarizing the multilevel image to a  
binary image, comprising:

code of a communication step of communicating with  
an external image output device via a network;

20 code of a characteristic-information storage step  
of storing characteristic information of the external  
image output device;

code of a connectivity control step of controlling  
connectivity of the binary image, which is binarized,  
25 based upon the characteristic information stored; and

code of a transmitting step of transmitting the



binary image, the connectivity of which has been controlled, to the external image output device.

16. A computer-readable storage medium storing program code of an image processing method for inputting, pixel  
5 by pixel, a multilevel image containing gray-scale information, and binarizing the multilevel image to a binary image, comprising:

code of a communication step of communicating a parameter with an external image output device via a  
10 network, said parameter controlling connectivity of the binary image that is binarized;

code of a connectivity control step of controlling connectivity of the binary image, which is binarized, based upon an obtained parameter of an output  
15 destination; and

code of a transmitting step of transmitting the binary image, the connectivity of which has been controlled, to the external image output device.

17. A computer-readable storage medium storing program  
20 code of an image processing method for inputting, pixel by pixel, a multilevel image containing gray-scale information, and binarizing the multilevel image to a binary image, comprising:

code of a communication step of communicating with  
25 an external image output device via a network;

code of a reading step of reading a test pattern

